HALF-HOUR LECTURES

ON DRAWING AND PAINTING:

CHIEFLY PRACTICAL.

GIVEN AT QUEEN'S COLLEGE, &c.

BY

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PREFACE.

In my course of teaching, which has been carried on during a full half century, I have considered it necessary to give oral lectures interspersed with such descriptive matter, as must or should accompany the acts or performances of the hand by the master.

I hold that oral lectures alone are not sufficient to this end; but I feel assured that much instruction may be afforded through such lectures, in addition to the simultaneous *telling* how, and *showing* how, which may be classed as manipulative.

These Lectures are necessarily short, because I have considered that young memories should not be too much taxed on occasions where attentive thought should have place. I have still further compressed them to suit my fair young readers, as they were designed for the most part for the instruction of female pupils.

I have endeavoured to make them mainly practical, in order that they may be more generally useful. I

have avoided technicalities, as far as I consistently could. These Lectures treat of Art generally, but apply more especially to drawing and painting in water colours, though the remarks occasionally occurring, through them, may apply equally to oil painting.

They address themselves chiefly to the landscape tyro, but refer also to figure painting. I treat of colour on the Newtonian system, as addressing itself more particularly to the requirements and practice of the painter.

New lights have been introduced of late into the system ; but upon this, for the sake of simplicity, I have not enlarged.

Of the laws of perspective, I have said very little, firstly, on account of insufficient space for the necessary diagrams; secondly, that other and more explanatory means should be taken to attain a knowledge of them; but that they should be known to a certain extent, I hold to be necessary.

LECTURE I.

INAUGURAL.

In no science has there been of late years more irregularity, and more vacillation than in that of painting. The same thing might be said more or less of all ages. As this latter part of the question, however, belongs more particularly to the general History of Art, it is not my intention to enter upon it now. The present consideration bears upon the subject in reference to latter years—a time within the scope of my own experience. Many and various have been the modes of instruction introduced from time to time—all, more or less, failures in degree. Much good doubtless existed, or exists in most of these systems; but as they have been for the most part in opposition, each to the other, it remains for us, as teachers, rather to select out of the mass, than to bring forward new measures. It is my province here to speak more fully of the methods of instruction in *Landscape* painting, or drawing, so called; but as that which belongs to one study refers

in no slight degree to others, I shall take occasion—as opportunity may offer—to include mention of architectural, or object drawing, figure drawing, &c.

It is not a little singular that in many instances—in many stages—progression or retrogression has gone on in just an inverse proportion to the means of instruction resorted to.

This is more noticeable in Landscape painting than in any other branch; and so it happens that because Landscape painting has perhaps been less interfered with by law-givers in Art, fewer conventionalities have been introduced, and the wider has been the field for the exercise of Nature, in regard to her own laws and the spreading forth of her simple truths.

Be the causes, however, what they may, it is certain that Landscape painting has made greater advances in this country than any other branch of Art.

In my younger days, when I was a teacher of drawing in schools, as well as families, I did precisely as others did: I put certain copies, bad examples it must be admitted they were, before my pupils. These examples were copied, I will not say how, by the pupils: the masters touched them up, as it was called, and the object was achieved.

Modern times and modern requirements have called for other measures. Painters in the present day have seen that other means are necessary, and that, moreover, they are at our disposal. Nature is now shewn to be the mistress, to whom the master is to be

but the Wegweiser, the pointer out of the road which she has appointed us to follow.

The Architectural examples which were put before pupils were still worse than those I have spoken of. The five orders of columns were given with fancy capitals, and with entablatures "*à discrétion*," including as many or as few members as best filled up the amount of space—this amount of space being also entirely optional with the designer. A Grecian temple was a thing made of an indefinite number of columns, and a sharp pitched pediment. All that was not Grecian was called Gothic. All that was not Gothic was called Grecian. Drawings of this class were almost invariably made in Indian ink.

Flower painting was in high estimation at this time. The painting of subjects of this kind was effected with bright colours alone, the shadows—when any shadows were introduced—were put in with the same colour but stronger in tint. Such was uniformly the case. The leaves were painted with sap green, used more strongly in the darker parts, which rarely happened, where shadow *might* be. As for cast shadows, they were quite out of the question; and backgrounds were altogether dispensed with; the white *cardboard* standing in lieu of such.

Figure drawing fared little better. Ill-drawn heads from ill-drawn copies were laboriously blackened over with Conté chalk; the intensity of blackness being the chief desideratum. Among the best copies, Lebrun's

exaggerated "Passions" were great favourites. Such was the state of Art instruction some thirty or forty years ago.

About this time the use of the lead pencil became more general, and for landscape drawing supplied the place of chalk. Prout, Harding, and one or two others produced—through the means of Lithography, then a new art—some examples for the teachers' use. This was a step in the right direction, and did much to counteract the bad effects of a new style, which might have been more truly characterised as the vulgar or coarse style, in which all carefulness of delineation and manipulation was set at nought. The introduction of this new "bold style" was occasioned by a desire to avoid the overworked laborious dottings and stipplings of a manner of pencilling, then common—entirely the opposite of, but not better nor perhaps worse, than the newly introduced "*bold style.*" In the Lithographic examples, of which I have spoken, good drawings of tree forms, and sketchy bits of old buildings were well calculated to inspire in the pupils a desire for the picturesque in Landscape, a characteristic in Art essentially British. There was to be found also in these Lithographic impressions an adaptation of handling, in conformity with the surface or texture of the objects represented. Thence arose a desire for peculiarities of touch for each variety of foliage. But this, though carried to an useless extreme, was inoffensive when compared with the vulgar and meaning-

less "rough" or "bold style" which was then the fashion.

Lithography, by the same able hands, has since furnished the students of Landscape with examples of the highest excellence for their imitation, in rendering nature with the black lead pencil. It has also supplied some very good specimens of handling and contour for the figure student.

Flower painting has fallen much into disuse, save for purposes of ornamentation in which it has become blended with architectural qualities, taking a totally different position through our schools of design.

Through a course of years, Perspective has been more or less inefficiently introduced by teachers of drawing as a science. Rarely, however, has it been made practically useful as in connection with the actual studies in progress by the pupils; nor could it well be indeed, when nothing but "drawing from the flat," as it is technically called, that is drawing from drawings or prints obtained in our schools or in families. Numerous defective systems have been propounded of late years to make Perspective understood in reference to drawing objects, and Boards of Education have been either misled by charlatanry or foiled by Dame Nature herself, who *will* have her *own* way in the affairs of her sister Art, with whom she is in such close intimacy, and to whom she bears so striking a likeness, that the one is at times—at least such is the painter's hope—mistaken for the other.

In Art, as in our garments, fashion has ever held a powerful sway. The Roman, the Venetian, the Flemish, and the Dutch schools have each at different periods been in the ascendant, just as fashion happened to lead. This may be traced in minor points, even in the seemingly undeviating art of the ancient Egyptians, through *their* long course of ages. In Greek Art, the same has obtained. Little may we wonder then that at one time the pictures of a Cuyp were held at little value, at another as almost priceless. Need I refer you to Poussin and others to remind you that many of the qualities which were formerly pointed out as excellences, as rare beauties, by the connoisseurs of a day lately gone by—nay hardly yet past. And yet in these our times, those very beauties are now considered by men of high acquirements in art as so many blemishes. It may be that fashion brings about *this* change; but it may also be that facts—not then seen, and which men *would* not see—are now by the simple reasoning of Nature's theory made evident.

These works and such as these, nay, almost all the works of the old masters *in Landscape*, are felt to be—aye, proved to be, replete with untruths, and therefore are sorry guides for the rising generation. And yet these *are*, even at this very day, held up to us by some as infallible patterns of all that is excellent. In this conflict then—in this state of things—what shall be our course?

FIG. 1.

Fortunately for us in our dilemma we have one *sure* guide — Nature, unbiassed by caprice, unchanging with fashion. Let us follow her dictates. But how? This brings us at once to our present purpose—*your* method of study, and *mine* of promoting it.

In the first place then, and as the first consideration, I shall propose to you that you take every opportunity of practising the eye with form. Chiefly by *drawing* forms; but not alone by *actually* drawing, but by the *consideration* of forms such as may be at any time before you, (I give you a little group of still life objects for practice, Fig. 1). Accustom your eye to the apparent slope or inclination of the sides of objects as they recede; and think at the same time, though no pencil or paper be at hand, how such and such forms *would* appear when reduced to lines on paper. Bear in mind the simple rules of perspective with the truth of which I shall endeavour —as I always have done—to impress you, as well as the necessity of, remembering that lines, with the pencil, or with the chalk, or with the brush, are but the representations of the edges or boundaries of forms, and that you are to draw them as they appear—*as they appear*. I know, for instance, that the lines of the cornice of this room *do not actually* slope downward, but I do know that they appear to slope down perspectively, and *as they* appear so must I draw them. And I know as an absolute certainty that the rules of perspective make this evident, and that the knowledge of such

rules will not only *assist* you in the actual drawing, but that such knowledge is indispensable, inasmuch as that without it you are uncertain as to whether you are right or wrong; without it you have no means of proving you *are* right when really so, or wrong when you are *possibly*—I fear I may say *probably*, so. Propose to yourself, in the same way, the consideration of light and shade as belonging to objects before you. Consider them also with respect to their colour; for the light and the shade are never the same in hue. This I shall hold it my constant business to explain to you, well knowing the inseparable connection of colour with light and shade; how impossible it is to take them apart, and how difficult it is, at the same time, to take them together. This, however, I consider of such importance as to form the substance of a separate lecture.

There is a beautiful pleasure in this mental delineation of forms and qualities of objects, this imaginary creation of pictures. It is a pleasure too which becomes still more attractive in the fact of increased power in actual drawing through its means. Nor will it be less a satisfaction to you to find, that with the increase of knowledge and power thus brought about, a commensurate increase of interest and pleasure will result, and thus will they go hand in hand; the more pleasure the more knowledge, the more knowledge the more pleasure.

The perception of form and colour in many varieties

of objects will insensibly induce the inquiry into the beauties of certain intricacies of both, in natural objects, and in the most beautiful of the works of man; as for instance, the ingenious foliations and interlacings of architectural ornament, the lights and shadows of projections, and the contrivances of the architect to make these effective. The smallest plant or the largest tree, whether real or imitated, will excite a pleasurable investigation and satisfactory solution.

I shall particularly direct your attention to the drawing of trees as an indispensable portion of Landscape. I shall notice to you the characteristic differences of growth and foliage. The different qualities of surface in light and shadow; the difference in degree, as to aërial perspective, where atmosphere and distance intervene.

I shall take occasion also to advert incidentally to such geological and meteorological peculiarities as come within the range of the Landscape painter's study.

In regard to tree forms—it is my intention to draw and paint before you on a sufficiently large scale, and thus show you by actual practice, such methods of manipulation as I have found to be best adapted to the various circumstances in reference to the objects represented.

With regard to Composition, as a branch of your study, I have to remind you that it is very much a matter

of memory. The practice of mental drawing, to which I have before alluded, will here be found of all-powerful advantage. Composition is indeed but the combination of a number of parts or objects, and the power of seeing properly the objects themselves will—with very little practice—grow into a further power of combining them as pictures. To this end I shall require of you certain compositions from subjects which I shall give you, or describe to you verbally. I shall in these cases take occasion to point out circumstantial peculiarities, adding such hints as I may at the time consider to be useful in conducing to the production of well arranged compositions.

I shall continue to instruct you in the Theory of Colour to the extent which I may find necessary to the understanding of painting generally *as students*, pointing out to you the value and advantage of certain colours as pigments or paints for certain means.

In fine, I shall do all I can to improve you in Art, upon the fair understanding that you will in return do all you can to improve yourselves. I think I may express a hope that the pleasure will be reciprocal.

LECTURE II.

COMBINATION OF LINEAR CONSTRUCTION—LIGHT AND SHADE, AND COLOUR.

WHAT is Composition? It may well be asked, for in the modern acceptation of the term it seems to have no meaning. Our new school seems to ignore it. "What aid do we ask?" says the modern student of art; "What aid even from the boasted sciences of the present day? What help can they give us? Is not art and poetry one and the same?" say they. "Out of each grows each, emanating and embracing. What have mechanism and physics to do with our productions in art?"

The Sun, great painter as he is, great colourist as he is, great draughtsman as he is. What has he to do with artificial construction, with methods, with mechanical agencies? What rule of outline? what of light and shade does he propose to himself? Where does he begin his photographic work? All over! not at any particular point, and so he goes on to

the close, even to the completed work. Can *we* do this? Is there for us no beginning? No starting point? No outline? What are we to do amid all this conflict?

Much stress—very much stress has been laid on outline as a first necessity; such necessity so considered, dates indeed very far back. The hieroglyphs of the old Egyptians were evidently first outlined, then that outline was corrected by a master-hand ere the sculptor went to work to incise the forms. This is enough to tell us what amount of consequence was given to the outline.

Whether or not such outline was made use of by the Greeks in the execution of their beautiful bas-reliefs, we know not; though I cannot help thinking that such must have been the case. When I speak of the modern students of art who seem to ignore the value of scientific and other mechanical helps, I am reminded of the music of the present day called the "new style." Herein, composition is set at nought. I mean by composition, a something to which laws are attached. In this music new and beautiful instrumentation is found, even new chords which, if not beautiful in themselves, are at least new as to their appliances, but the means seem to me to be turned topsy-turvey. The instrumental accompaniment appears to form the principal part, the words becoming secondary. There appears to be in this music, a want of beginning and end to the phrases. Now our "New

style of Art," as would be, or might be carried out by our new schools of students, would necessarily produce the same apparently ungoverned results.

Are we then to have no more pleasure in the arrangements of our pictures, where adventitious aids have been called in to our assistance, pictures which have given us so much interest in the construction of their several parts, and their nicely calculated proportions, measured distances and, as we conceived, well-disposed quantities? Are we to have no laws to guide us in our perspective? None to help us in our arrangements of colour? None to assist us in regard to our chiaroscuro? None for our proportion in figures and other objects? Are we to cast away in fact all we have learned through their means? Putting aside these new notions, let me proceed.

I have expressed an opinion that the three elements of a picture, namely—composition, light and shade, and colour are to be taken unitedly in its construction.

Firstly then, light and shade considered as one of the three portions or elements is to be understood as what the Italians call chiaroscuro.

Chiaroscuro, then, is to be taken to mean the nicely balanced amount of dark and light quantities of a picture, which by due adjustment satisfies the eye.

Now whether this sum of dark and light in their several degrees, or as dark and light in reference to the integral value of one or more colours be taken into

account, so is it necessary to duly sum up such amounts as that they shall justify as a whole a true balance.

In one of Sir Joshua Reynolds' lectures, he tells us of a means he adopted to ascertain the amount of light and dark tint severally, which he found to have been employed in pictures by the Old Masters that satisfied his eye. His process was this:—on a card, by blackening a portion of its surface with a black lead pencil or chalk in different portions and gradations, he set down their amounts. This was done in three tints, black, half-tint, and light, the light being the bare surface of the card. Having ascertained by this operation the relative proportions of dark and light to be found in many different pictures by distinctly different painters, and in distinctly different subjects, and finding them all pretty much alike in their quantities, he came to the conclusion that there must surely have been a rule of amount common to all, though not perhaps then recognised as a law. Surely, however, these results cannot be wholly fortuitous; there must be law of some kind presumed or implied, to bring about such results. Now colour forming, as we have said, one of the elements of construction of a picture, must be considered simultaneously with the form, and light and shade adopted in such picture.

All these arrangements must then necessarily be made, having been preconceived at the outset.

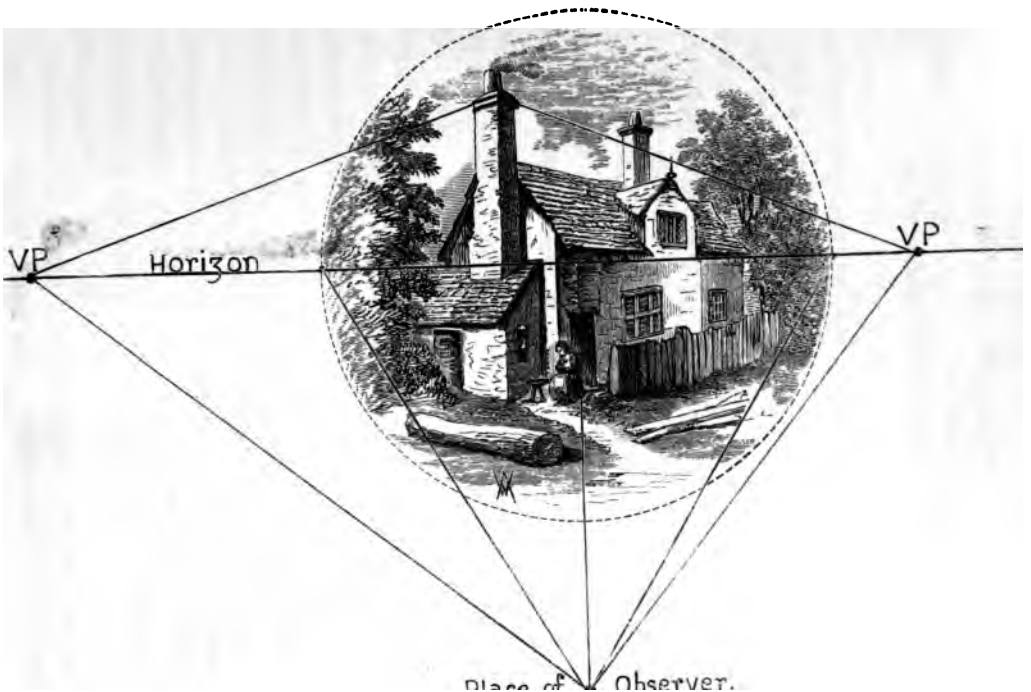
Suppose now a dark object and a light one to be juxtaposed, the light object happening to be by circumstance in shadow while the dark is in light; then the effect would be partially neutralized, the dark object being reduced in its depth by circumstance of light being thrown upon it, while the light object would be equally robbed of its power *as* light by the fact of its being in shadow. Reverse this and a powerful effect will be the result, this must have been the painter's intention in the outset. And now let us consider the same case in regard to colour employed upon the two objects. Should the light one be of such tint as in its integrity as a colour would not, or could not represent in its own nature *light*—say for instance had it been red, the attribute of which is half-tint, or were it full blue, or purple, whose attributes must be dark, then the intention would be nullified. Had the light object been yellow, whose characteristic is preeminently light, then the intended effect would have been preserved. Had in like manner the dark object been of such a tint as would be best expressed by light, it will be evident that a loss of power would be there sustained. But had this object been of such a hue as would be most telling as dark, say for instance indigo or purple, then the most positive effect would have accrued. Now, according to requirements to this end, it will be evident that all this should have been conceived and determined upon in the outset.

I have shown thus the necessarily simultaneous

conception of the three circumstances—Form, Chiaro-scuro, and Harmony of Colour, and I dwell upon it even as a law, such is its paramount necessity. I speak of the laws of colour in themselves, as to their harmonies and their complementary characteristics elsewhere, therefore I avoid that part of my subject now. But here is another law which is no less strong, no less irrevocable than those pertaining to colour which are themselves laws subject to the eye itself, and such also is that which I am now about to introduce, and moreover to enforce. I call it visual focal perception. (Fig. 2.)

When we look at a natural picture, a real scene, whether in or out of doors, our view is restricted to a certain amount of space, around the centre point upon which we focus our view. This focus of view is dependent upon our will, but the amount of space all around it is subject to that focus or centre. It has been accorded, and has thus become a law, that thirty degrees can be seen on each and every side of this centre point of our view, above, below, as well as upon each side—thus from extremity to extremity of this accorded space we have in all sixty degrees. This focus of our view must necessarily be the point of sight, occurring of course in the very centre of what we see, and at which we are directing our intensest vision. It is always to be understood that a picture, or rather scene, is so viewed at a glance. Thus viewed, the point to which the observer directs his eye will of

FIG. 2.



course be most clearly and perfectly seen, and in proportion to the greater or less distance from this centre, so will surrounding objects be more or *less* distinctly seen, until at or beyond this imaginary circle of demarkation—marked in our diagram by a dotted line—they will have become too indistinct for representation.

Let us now endeavour to test in some measure the utility or necessity of such rules or laws as we have called them, and which we have laid down as necessary standards, or to say the least, guides at our outset as well as during our progress. We will take, let us suppose, as an essay piece something very simple in landscape composition. There shall be a building—say a cottage—such as one meets with so frequently in Surrey, such indeed as I have given a sketch of in this book. Behind this cottage we will suppose a clump of trees. In the distance, on the right of the proposed picture as we look at it, shall be distance of some sort, where the horizon is evident in some shape or other; and there may be intervening between the distance and the foreground, some fields, trees, hedges and other landscape matter. Let us say also that there shall be a stile of ordinary height, leading out of the cottage garden on the right of the picture. For the sake of proportion there shall be a figure somewhere.

Now to work. Firstly then, our consideration must be the horizontal line. How much foreground do we

desire to have in our picture? because the placement *at our will* of the horizontal line has much to do with this. So then where shall the horizontal line be drawn? Much depends upon this. If you suppose yourself to be drawing this scene in reality, you might be sitting on a camp-stool, or a chair, so far back from the foreground of the picture as to include a certain amount to the right and left of the centre upon which you choose to focus your view. I have said *choose* to focus your view, for it is *your will* only, which prompts the choice in this matter, and when the will has so settled the point, then the *law* affirms it and it is fixed.

It is a common practice to place the horizontal line of a picture one third up, from what many writers on perspective call the base line: though *I* do not believe in its existence.

Let us say then from the bottom of the picture. In point of fact this is only a measure of convenience, for the real place of the horizontal line *must* cross the very centre of the circle into the middle of which we look. But as we may choose to cut off, or leave out so much of our foreground as circumstance may point out, the horizontal line may be well and commonly placed as we have stated.

Now remember that you, who are the sketcher, are sitting on a camp-stool or chair. How high is your eye from the ground in this sitting position, as you are looking straight forward at the horizon? say four

feet. Four feet in height then, *anywhere* on level ground, is by law the horizontal line. Thus then the stile which we have proposed, would be in height as high as a person sitting, just the height of the horizon. Mind this *is* law. The same would obtain in regard to the steps of the house: thus calculating each step of the approach to the cottage door as six inches, being the average height of a step, it would take eight steps to arrive at the height of your own eye, and you would thus not see the flat top of the upper step; but of the others you would, and must see the tops or flat portions more or less according as they were nearer to the top, or lower down. The door-sill would be therefore even with the horizon, and thus were a person of your own average height sitting at that cottage door, she would be her own sitting height, namely four feet above the door-sill.

Now in the case we have stated, it will be evident that there will be no distance seen above the top of the stile, save indeed the small amount of distant mountains or elevations which rise above the horizontal line. All retiring lines or edges of the house above this horizontal line, such as windows, roof, and so forth, would as a matter of course slope downwards towards the horizon. The top of the chimney being the highest retiring line, would in your picture slope down more than all the rest. Now as the arrangements we have thus made have been proved to be inconvenient as regards the horizon and its place, so

it will be, or it would have been better if you, the observer, had been *standing* or so placed as to have occupied a somewhat higher position, in which case, as it will be evident to you, these difficulties would have been avoided. A better proportion of ground or distance would have been gained above the top of the stile, giving opportunities for a mid-distance. In this space might have occurred picturesque objects, a road for instance, or a river with boats on its surface, buildings on its banks; then there would have been most likely woods, or single trees, before we arrive at the hilly distance.

In speaking of the building—the cottage of the foreground, we have supposed that it should be in your picture placed, not at or even very near the centre of the space allotted you, but inclined either to one side or the other, better perhaps to the left side, because the space on its right will be thus open for the distant objects we have spoken of.

The foreground of your picture being the garden attached to the cottage, you may furnish as you please, either with bushes, vegetables or picturesque garden requisites, such as a grindstone, a hen-coop with its chickens and what-not.

The group of trees, of which we have spoken as backing the cottage, may be of such character as you think best both as to form and quantity, their naturally dark tint will form a good background for the colour of the building, which may be light or middle-tint

according as you fix upon the materials of its construction, whether brick or plaster wall, tiled roof, or otherwise.

I might cite many more examples after this manner, but time or space will not at present permit it. I have endeavoured to show you by this, however, the necessity of some of the rules which I have laid down as laws—namely, that of visual focal perception, and most clearly that of perspective, showing the space to be occupied by your picture in regard to truth of quantity.

I will, however, admit that this absolute truth of quantity is frequently in some small measure set aside by painters for the sake of picturesqueness, or for some other good reason, but the guiding law is not the less true.

LECTURE III.

HOW TO OBSERVE NATURE.

I HAVE before observed that it is a most common thing for persons uninitiated in Art to take preconceived views of objects, to set them down indeed as according to their own notions of their appearances. It is a plain fact that the eye frequently, almost constantly, looks without sufficient observation at objects in nature. For example, I know it to be common with untutored persons to paint the stem of a tree with a brown tint. Ask them why? and they will say, the stem of a tree is wood, and so must naturally be brown. Tables and chairs are mahogany, and that mahogany is in its own local colour a certain sort of brown. It will be not unfamiliar to you, that blue is the colour commonly used by the uninitiated wherewith to represent water. Water, however, is not blue in itself, simply because it *is* water. There actually is, however, a blueness in some waters, as, for instance, the Lake of Como, and some other lakes. That of

Orientz has a certain amount of greenness as its characteristic colour. The circumstances of absolute colour in water may hardly be tested by dipping a tumblerful, where I expect we should look for it in vain—but by observing it as affected through its greater body by the colour of white railings or other objects reflected in it. The Mediterranean Sea is commonly painted blue — perhaps too commonly. Stanfield has painted it blue, and Bonnington and others have done the same. These are authorities not to be unrespected. An artistic sailor friend of mine used to aver, that when he dipped a glassful of water from the Mediterranean, it appeared like soda water stained with indigo.

The peculiarities, or errors, so to call them, regarding *blue* as the colour of water is of very long standing.

Architectural draughtsmen of the old school were in the habit of painting their sheets of ornamental water bright blue, and the panes of their sash windows to match, nor am I quite sure that the same practice has entirely fallen even now into desuetude. It must be granted that portions of glass windows will, under certain circumstances, appear blue, as for instance, when the blue sky is reflected into them. It must also be granted that in looking through a window into a room or dark recess, you are looking at and through a mass of atmosphere which having the blackness of unlighted space as a background, becomes by its slightly opaque character somewhat colder and thus bluer; but were

the windows not glazed, the result would be the same. It is, therefore, not the glass only which would cause the blueness.

Dark hair is subject to an infinite variety of tints through the shining quality of its surface, in just the same way as is already noticed in regard to glass or other polished surfaces; even the face, the skin itself—as the portrait painter well knows—is subject to all sorts of varieties of tint by reflection according to its changes in position. Cold greys, blues, greens, and so forth alternating with the carnations and other warm tints. But it is not only water, glass, crystal and like transparent bodies which are painted conventionally with blue paint. The young lady on her journey homewards floats down the Moselle, singing a favourite song about "the blue Moselle," which empties its yellow waters into the only less yellow Rhine; and passing over that strip of sand-and-chalk tinted water which divides the shores of France from her own land, she still sings about "sailing over the dark blue sea." The very mariner himself talks of being "out in blue water," when he is far from the shores of his own country. The blue mountains have become a proverb; all young ladies paint distant mountains blue as a rule, even as an established law. True it is, that seen through mist they do appear bluish, more or less. Even the beautiful blue of the sky has been subject to much conventionalism in treatment. The term "an Italian sky" is known to everyone,

it is generally understood to mean in representation the bluest of blue skies, a tint spread equally over the whole space, of one uniform hue. This, however, in no wise can be the case, there is no such thing as an equal and uniform tint throughout the whole surface and amount as expressed in a picture. Neither is an "Italian sky" so called peculiar for its blueness. *Darkness* of tint is its speciality; this darkness arising out of the fact that it is seen through less of misty atmosphere, and thus approaches the mere blackness of space. Were the sky observed from a high mountain even in Wales or Scotland, say, for instance, Snowdon or Ben-Lomond, or Ben-Nevis, the blackness—so to call it—would be much like the "Italian sky," and for the same reason that it would be seen through a purer atmosphere. The sky is in fact, generally speaking, lighter in this humid atmosphere of England because of the pervading mistiness through which it is received.

The conventionalism alluded to in regard to blueness, or otherwise, is found to obtain with the tyro in Art in other hues of colour—Trees, for instance, are generally painted by the uninitiated simply green, though, as a general rule, there is perhaps less of that tint in them than of grey in its many varieties. Their leaves, more or less, have a slightly polished surface, and when turned upwards, as is generally the case, receive by reflection somewhat of the blue grey of the

sky which is above them, as do their under sides a small amount of warmer colour from the earth. An old and famous water-colour painter, John Varley, was so convinced of this, that he boldly averred that there was no such thing as green in Nature. This, of course, was going too far, but it was an index of the strong feeling which often attaches itself to a clever mind. It is a curious fact in regard to this anecdote, that Varley compounded afterwards a set of greens of neutral character, which were called after him "Varley's Greens."

Roofs of tile, and walls of brick have, in the eyes of the tyro, a pre-conceived notion of redness, earth of yellowness or brownness, as in roads, paths, and so forth. Pailings are, with the same kind of persons uneducated in art, conceived to be brown because made of wood. This argument might be carried much further, but it is not needed. Observation, directed to the real facts of the case, will make it unnecessary. Oriental nations, like children or tyros in Art, have certain notions of mixed local colours and depend upon them for the excellences of their productions. Now the difference appears to be this—the Eastern painter proposes to present colours as he conceives them to be, as indeed, he thinks they are. We, the followers of Art in Europe, propose to ourselves to represent forms and colour as they *appear* to be. Now the one method of painting the truth is less difficult

han the other. The greatest difficulty lies in the mancipation of our minds from the thraldom of pre-onceived notions. Let it not be forgotten that we ntend, in our pictures, to paint things as they appear o us, as we would wish them to appear to a spectator who views them under the same conditions as our-selves. We do not wish that he should mistake them for the real, but the representation only of such things shewn as they would appear under such cir-cumstances of position, illumination and so forth.

Rapid sketching from nature is what may be called a common error. It is only to be undertaken by the practised and accomplished hand, one which has by practice in the severer and more thoughtful manner acquired the mastery over the materials and subject of what is undertaken. Your young practitioner who pursues the rapid mode may, by a talented and quick perception, have acquired a passable power approaching to sufficiency for such. He will have shown himself able to complete a clever sketch, full of nerve, hardihood and dash, so as to take with the million. He will use his common-place tints and mixtures of tints, such as he has been used to employ under similar circumstances for all sorts of ordinary objects and effects. But it will make evident the fact that his means have been erroneous through want of the *true* mode of study.

The said rapid sketch being completed, may exhibit

all the spirit of first intention, may possess what the French call *chique*, and may also have brilliancy, though perhaps of untrue tints; but, alas! it cannot be a truthful representation, enough time not having been bestowed on it for the consideration to make it so. Let me urge upon you the necessity of sufficient time being given to your work, whether your sketch be in colour, or only effected with the black lead pencil. Consider well the light and shade; draw well the forms and review well your work during progress. A very able Landscape painter, Thomas Creswick, R.A., told me that he had made careful sketches in black lead pencil of every mass of rock throughout the Pass of Llanberis. This is the true way to study Nature, and ultimately to paint truly and well.

Having adverted to the loose, flashy, *rapid* mode of sketching from nature, and having pointed out its objectionable qualities, I now proceed to mention another mode not altogether unobjectionable, though less so than the former method. It is pains-taking—perhaps pains-fraught would better express what I mean—it is careful and observant, but it is little and mincing, not to say niggling in manner. It is dry and cold, and therefore not pleasure-giving. This arises chiefly from the want of power in what is called handling, an adequate method of using the brush or pencil so as to make it appear that the work is free from absolute difficulty—from apparent pain in the execution.

FIG. 3.

FIG. 4.

Let us now proceed to work. We have chosen a mass of rock, it shall be supposed. (Fig. 3.) Whether it be in the pass of Llanberis or elsewhere, it matters not. First then consider well your horizontal line, that is to say, what is the height of your own eye, which always represents the horizon with respect to the object you are about to delineate. Then let the portions of the object you are engaged upon be agreeably divided, neither too much above, approaching too nearly the top of the picture, nor placed so near the observer as to cause the receding perspective sides to appear quaint, as it is called. And take care also, that these receding sides do not occupy too much space perspectively; for this is an error you are likely to fall into from want of practice of the eye. The patches of moss and varieties of discolouration will come easy enough, and need no word of advice.

Now then, suppose you take an Architectural fragment or portion—a capital, for instance, from some early Norman doorway, or a more classical specimen—say the Corinthian Capital, known as that of the Jupiter's Stator Column, which is a very beautiful example. (Fig. 4). This will need your greatest attention in regard to the drawing; the volutes having their proper bearings as to surfacial position, and having truth of form in their curvature. The Acanthus leaves forming the ornaments below them will also need

your best care in their delineation, as will the fluting of the shaft of the part of the column below.

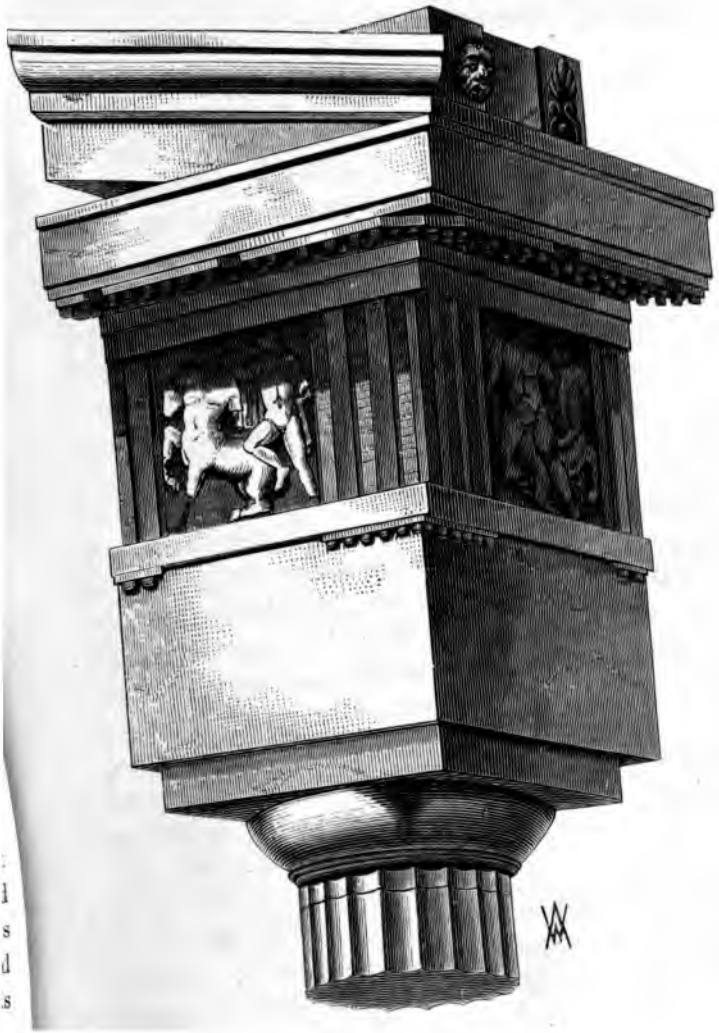
In the drawing of such tree-forms as you may select for study, see that the lines be crisply drawn, and that the angles of the branches be correct, nicely touched in with a firmness of execution according to the amount of your practice of hand. Should a building, such as the Surrey Cottage before alluded to, be your subject, let the roof, the receding side of the walls and windows be in accordance perspectively with the chimney or chimneys and other projections.

Arches, round or pointed—by which I mean Gothic —must be well considered in the perspective place of the point or centre of the arch. This is a matter very frequently wanting in scrupulous attention. You will no doubt give the same attention to the corner of the entablature of the Parthenon here placed before you. (Fig. 5.) In regard to the true method then, I would remind you that careful observation should be your first consideration.

I may be excused here a digression, in order to enforce a precept.

Sir William Ross, one of the best and most truthful portrait-painters in miniature, told me, and indeed I have observed it in him, that he always looked sufficiently long at his sitter to imbue his mind with an adequate recollection before he removed his eyes from his model, thus he was enabled to proceed to

FIG. 5



his actual drawing of form with a well-stored memory, at least for the time being.

Let me now advise your trying your powers at the composition of a Landscape.

After having well weighed and studied the amount which you intend to include in your picture, you as usual arrange the place of your horizontal line which of course depends upon your own position. Your point of sight, commonly so called, will be necessarily fixed by the quantity to be included in your picture. Then you naturally take up the chief object of your work, be it what it may. A castle, an abbey, or other building, or even picturesque mass of rocks. Draw this most carefully, for remember that even a rock has its true form geologically speaking, as well as in regard to picturesqueness of outline. Draw your building, if such it be, strictly and truly, according to its architectural peculiarities. This done, proceed to the less prominent portions of the picture. Mountain forms will need your greatest care, as they have their peculiarities according to circumstances of country, position, and so forth. Having drawn your general outline, as well as its individual parts correctly, you may take your brush in hand and carry on your work in colour.

The sky should claim your first attention in this phase of your work; let it be sharply though not too edgily executed. Your distance naturally follows this,

when the lower portion of your sky is dry enough. We are now speaking of water-colour work, then proceed to carry your distance into the middle ground and its objects generally, but carefully, take up with a sufficiently full brush your principal forms. Treat them with a firm handling, but not devoid of sufficient care.

The colours you employ you have well considered, no doubt. The difference of hue in the lighted portions and in the sides in shadow you will doubtless have thought well upon, knowing the difference of hue in regard to parts in light and parts in shadow, their reflections and their causes. The foliage, where foliage occurs, comes naturally to be painted on a fore-laid tint, whether sky, distance, near surfaces of objects, or whatever else.

You have now arrived at your immediate foreground, and this will need your firmest handling, most decided touch, most effective colouring.

Remember that it does not follow that *because* it is the foreground, it should be darker than the rest, or even more strong in its colour or execution, for the whole has to be viewed as one simultaneously conceived number of objects so massed as to be a harmonious whole.

Further than this it needs not that I should advance my own method of instruction. Judge then for yourselves in the completion of your work, for Nature is before you, and she will explain all that is now wanting.

I may remark, however, that if you introduce figures, they should be executed with the same freedom of hand which you have employed throughout your landscape portions, their colours should not only be consistent with their own peculiarities, but must harmonize with the tone and colour throughout.

LECTURE IV.

COMPOSITION.

COMPOSITION in art, as regards picture-making, is to be understood as the combination of certain materials in such a way as that they shall present effectively an impression of a certain scene or action. The subject may therefore embrace few or many objects; and it is the putting these objects together, so as, when combined, they shall form a whole which shall give pleasurable sensations to the beholder through the eye, that should be our present object. The sensations thus to be produced are manifold, and are hardly to be enumerated when we consider the variety of subjects and the means employed to bring about certain results. And now may be named the idea of truth or likelihood in the arrangement, whether of living objects or inanimate forms.

As in a poem, so in a picture, the unities of time, place, and action are to be preserved. If in a landscape, for instance, the effect of morning or evening,

mid-day or night, is to be given by such attributes as pertain properly to each. Unity of time supposes all the agreements of such time. The shadows of daylight are entirely different from the shadows of night, those of the morning and the evening have their circumstantial differences. As with the shadows, so of course with the light, whether as regards their hue or direction. Lengthened shadows are alike inappropriate to mid-day, as short ones to evening.

The unities of place are such as to necessitate a regard for truth in the avoidance of incongruities, however much of variety we may choose to introduce into our subject. The graceful date tree would be as untruthful and unbecoming in a Norwegian mountain scene, as the hardy Scotch fir would be on the banks of the Nile. In like manner, a Gothic cathedral would be out of place in the lands of the Moslem ; as would a minaret if made to rise from among the homely cottages of the Welsh peasant.

The rain cloud belongs not to the desert, nor the hot sand storm to the Scottish hills. These, you will say, are incongruities unlikely of introduction by even the unlearned in art. Not so, I could bring forward scores of instances among the lauded works of the Old Masters, not a whit less ludicrous.

The Dutch boor of a Teniers who in derision puffs his tobacco-smoke into the face of the Saviour, or the Roman in doublet and hose of Flemish make, who reads a printed bill on the walls of the guard-house

where St. Peter denies his master are not less incongruous.

The thicket of interlaced Western plants and trees, and the damp-stained, mossy stone, whereon Hagar sits, with her boy dying of parching thirst, are not less out of character. Yet all this has been done. It is perhaps hardly necessary that I should warn you against such evils in art as these, but many there are less strikingly offensive, which should form circumstances of avoidance in your summing up of Art's unities in regard to place. I shall not enter further into the unities of action. You will see at once how they apply and how they misapply. I have spoken of shadows and their colours more than once already, but I can hardly too often remind you of the necessity of paying due regard to them. I shall indeed have to enlarge upon this when on the consideration of colour, which will form the subject of another lecture. To the depth or intensity of shadow, I shall have to call your attention as a means of bringing together your subject or its various materials in regard to focus, and in regard also to breadth, two main considerations in a composition.

And first as to focus, or the centring of the eye upon a given and chief point. A good composition, whatever may be its subject, may be likened to a bright star whose flickering scintillations may be the minor lights or points which, though brilliant, serve to carry the chief brilliancy throughout, according to their positions with reference to the main light.

FIG. 6.

The chief power to be employed to effect this is opposition or relief.

The greatest opposition will be found most effective when bringing the eye upon the chief interest of your subject, which should be—when possible—some where near the centre of your picture. Suppose, for instance, a dark mass of trees to form the most telling subject of your work (Fig. 6), and that to their depth you oppose your brightest light, a mass of white clouds, or the glorious sun himself. You will have thus the greatest opposition for the eye to rest upon first. Now, if to the opposition of extreme dark and light, you can add the opposition of nearness and distance, you increase your powers; so also if you can make your opposition of dark and light, nearness and distance agree also with a positive difference of colour, you will still further increase your power; this would be the fact in the case I have pointed out, where the bright sun with its golden surrounding tone is brought into immediate contact with a dark mass of foliage, the colour of which under these circumstances would partake of a purplish green hue. Second to this, you would have, of course, some object of size and interest, whose reliefs in all respects should be less positive. A third object would take the next place in point of power, and such others may be introduced, further diminished in relief, more or less, according as their positions may suggest. Your picture would thus represent what may be described as spaces within con-

centrine circles, diminishing in power as they enlarged in their circumference, or as they receded from the centre or greatest point of opposition and interest.

Thus much for a general rule, but there are few, if any, rules which do not admit of exceptions, and in the course of practice these exceptions must ever present themselves to you. Indeed, were the general rule to be carried out literally, insipidity would be the result. Variety is ever essential, and in determining the positions of your several points your own taste must be consulted. Even for this, however, a rule may be brought forward in assistance. It is this: combine principal, second and third point of interest, so that they shall together form a triangle. The rule of variety would make this objectionable, but let them take such positions in your picture as that no two shall be either parallel with, or vertical to, the horizon, let their distances also from each other be *un*equal. The rest may take their chances, but if their positions were to be canvassed they would follow the same triangular rule with respect to each other as well as with respect to the three principal.

One thing is very certain, that you must not have two principal objects, or points of equal interest; the division of interest would destroy interest itself. The eye would wander for a resting place. There must be a culminating point, essential and determined.

Now to effect all this, it follows that a general gradation must take place.

The objects themselves, as they approach the edges of the picture, must be less strong in their own local colour, they must be less intense in their light and shade independently of colour (as far as they can be understood as independent of colour). The shadows towards the edge of the picture will, as a matter of course, be less dark, the lights less positive.

It will sometimes, however, happen that a very dark or a very light object must necessarily come near the lower edge of your picture. This takes place, or may take place, because the lower edge of your picture is that portion of it which, as the immediate foreground, comes literally nearer to your actual position when sketching a real scene, or to your supposed position when designing an imaginary one. Remark now what the painter's art would suggest under these circumstances. It would suggest to the painter the necessity of introducing only such objects as by their smallness of proportion or that of their prominent parts would occupy but little space in the field of the picture. You will perhaps say "Suppose that in reality such objects of large proportion were actually present in the subject under treatment. Should it not be introduced? Should the truth not be told?" I answer thus: In the selection of a subject, the artist chooses such as to his eye is fitting. The scene being, we will suppose, a real scene in Nature, would be chosen by the painter *because it was* in all respects *fitting* because it pleased his eye as such, because its properties

produced to him the pleasurable sensations of harmony. These sensations would arise from a complete organisation (good education of the eye), this want of proportion and other harmonies would displease him, and he would thus reject the subject, if under such obligations, as unfitted to his art, and thus opposed to his sense of pleasure in it.

This brings one to the mention of what might else have been overlooked. I have spoken of the power of dark and the power of light as regards contrast and relief, let me now impress upon you the necessity of well weighing the amount of dark and light, not merely in regard to its intensity, but also in regard to its volume. It is a simple mathematical conclusion, that a piece or space of absolute dark in a picture will have just the amount double the size of only *half as dark*. But this again needs modification, for if a small speck of dark be put in contact with a portion of absolute light, it will have increased power in proportion to its opposition. The eye will, by practice, soon acquire the habit of a just appreciation of such quantities, and it is rather to induce practice under such considerations that by such practice the eye may, as it were, become learned—than to require from you at once such a mathematical calculation that I have called your attention to the fact. Be assured, however, that until this habit be acquired, you will ever be hampered with obstacles in composition.

It has been my object in these discourses to make

them as practical as I can, and I thus engraft upon the different proportions of my subject certain methods of calculation in proof, as it were, of the truth of what I advance. I wish you, at the same time, to understand that I advance no new theory. All that I have said and shall say are facts well known, though perhaps not heretofore expressed, or put forward in the same way.

LECTURE V.

COLOUR.

THE triunity of system which seems to obtain everywhere and pervade everything, set up its fairy wand of prism-shaped crystal in the beautiful region of colour, there to be "a joy for ever." So simple were the principles, so satisfactory the system laid down by Sir Isaac Newton, that the beautiful wand was supposed to be fixed for ever. Not so entirely however, your scientific man is ever a meddler, and so the state of things is a little tampered with; but the painter, though he admit the "white light" of the scientific professor, sticks like a good and true lover of Nature to the beautiful triad of colour which he sees in her blooming face, hears in the sweet song she sings, and feels in every dewdrop she sheds around her. No, the true painter of Nature cannot desert his bride. He must and will have his triad of colours.

In treating of colour generally as part of the true rendering of a subject pictorial, we set out with the

simple fact of three colours only existing, or rather affecting our mind by means of the mechanical operations of the eye. We know of these three colours, Red, Yellow, and Blue, only as sensations, as ideas impressed or felt through the medium of the optic nerves upon the brain. In the same way, indeed, do all our senses act—hearing, smelling, tasting are in like manner so many different sensations which may be simplified as so many different feelings or circumstances of feelings.

Thus the idea of the colour red has been assimilated to that quality of sound which is produced by the trumpet, while blue has been in a similar manner likened to the sound of the flute. And so also of a pungent odour in regard to the sense of smelling, or a pungent flavour in regard to the sense of tasting, they are both assimilated to red in relation to colour, to the trumpet note in reference to sound. They are undeniably *felt* as such.

Now as we mix scents and flavours to suit our nasal desires and our palates. As we mingle sounds so as to please our ears, in chords of sweet harmonies or exciting discords, so do we combine our three colours to make our pictures.

A conservatory of rare perfumes, a concert of fine music, a banquet of nicely cooked viands are alike felt as pleasure-giving, more or less according to our several proclivities, and so, though in a higher degree, do we appreciate a fine picture.

There is a disease—for such it may be termed—called colour blindness; a want of capability, or adaptability in some persons, to receive the same impressions of colour as others are wont to feel. Difficult as it may seem, it is not altogether impossible to overcome in a great measure the almost chronic disease of the eyes.

We know that much has been done by able instruction in music; to this end, voices which have been apparently unequal to the production of certain sounds have been tutored by degrees into first, a very slight appreciation of differences in intonation. They have been almost imperceptibly tutored into dependence upon self-exertion, which self-exertion growing by degrees and gaining confidence by degrees, has strengthened into a moderate perception of differences in sound, until they have acquired an almost mastery. So also in regard to colour, it may be stated that young children generally have but a feeble perception in regard to degrees of affinity of different hues. This feeble vision, as we may call it, has ripened into increased power, so that those who have appeared to possess in the first place, what is called no ear for music, have step by step risen into the power, first of the perception, and then the appreciation of such requirements.

It may be a comfort therefore to some to learn that at any rate the modified form of colour-blindness is not wholly chronic, not wholly incurable. I have, in my

own experience among my pupils, found this to be the case.

Persevere then, and the eye will become empowered by practice to image on the retina, by the improved state of the crystalline lens, the objects it seeks to appreciate the shape of, and even the colour of.

I knew a young lady who was not able at an early age to discriminate between the colour of port wine and sherry, but be it remarked that, at the same time, she was not able to appreciate the difference of taste in them.

Now taste, like the senses of sight and hearing, is but an act of the brain in some part of its structure, and there is so much sympathy in all the senses that the induced strength in one gives power to others, and it is simply practice and good tutorship which brings about power in all.

We have spoken of sympathy as having an enormous control in regard to sensitive degeneracy. Now it is a well-known fact that the two sides of the human, and indeed animal, creation have an apparently understood agreement between them. Four-footed creatures are in general alike in their mode of progression, but a horse, for instance, can be so tutored as to walk like the giraffe, in opposition to its nature. Our hands and arms are prone to a corresponding action, the right as the left and so forth. But just observe the mechanical management of both hands of the violin player, and remark how each can be brought

by tutelage and practice to act conversely with regard to each other. Remark with what exquisite precision the touches on the instrument by the right, or bow hand, are adapted to those necessary to it, which are effected by the fingers of the left hand. All this is sympathy, and upon sympathy you may depend for much of the carrying out of the different efforts of the various sensibilities of our nature.

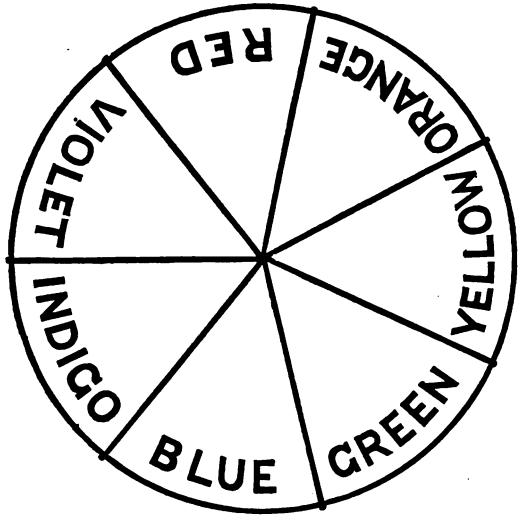
These are hopes which I hold out to those who believe they are not endowed by nature with the power to do this, that, or the other; as I have just said, persevere, and the chances are the power or powers will come.

You will, by practice, be enabled to see differences of form, hear differences of intonation, and appreciate differences of colour. This last word brings me back to my subject, from which you may think I have wandered.

Since this Lecture was first written, many opinions have been expressed as to the production of white light. Green has been quoted as one of the triad of colours in the place of yellow, and other changes have been suggested. Sir John Herschel has been much quoted in regard to these changes, and his is a great name, but then so is that of Sir Isaac Newton, and his simple theory, moreover, suits us best; it has been descanted on and agreed to by Chevreul, Field, Hay, and many others, and has been believed in, and agreed to by *all* painters of all countries. Through the system

of Newton, we learn that there are three colours, only three colours (Fig. 7). These are called primary colours, because they are original, self-existent, and cannot be

FIG. 7.



Newton's Theory of Colour.

produced by any combinations; the names of the three colours forming this triad are, first, red; second, yellow; and third, blue. The first is the loudest, the second the tenderest, and the third occupies a place between the other two. The powers of these colours have been calculated numerically, and are found to have these following values, namely, Red 5; Yellow 3;

and Blue 8; so that blue takes a value equal to both the others together, and so will it be found if we calculate them in comparison with musical sounds; but of that anon.

As I have a triad of colours to deal with, so I have made use of a triad of points (*i.e.*, a triangular form) whereon to hang my three colours. But I have the duplication and the triplication of these colours to take into account, you will say, namely: the triad of secondary and tertiary combinations produced through them. I answer, well then let us have two more triads of points for our purpose.

Thus, then, we have, firstly the three primaries, red, yellow, and blue, as stated. Then we have their several combinations as secondaries—namely, red and yellow mixed together, which form orange colour as an intermediate, and placed between them. Yellow and blue in like manner combined, forming green; and thirdly, blue and red which, together, produced purple or violet. So also of the tertiaries we have the mixtures of the secondaries which in like manner produce citrine, russet, and olive, tints which Science has furnished us names for, though for the sake of simplicity, I prefer to call them yellow-grey, blue-grey, and red-grey. Combinations may be thus carried on *ad infinitum*, which being produced are all greys, and greys are the colours more in request by painters than any other hues.

All the painter's generalised masses are greys, all

his uniting requirements are greys, all his secondary complementaries, so to call them, are greys.

I will here place my triad of colours in such triangular positions as accord with their relative positions—thus for the primaries

Red—*value* 5.

Yellow—*value* 3.

Blue—*value* 8.

Thus for the secondaries

Orange.

Purple.

Green.

The numerical values of these I hardly need set down, as you can calculate them for yourselves; though all this will be evident through their use.

Then come the tertiaries in *their* triad which will be arranged naturally in your practice, for a little more or less of either one or other of the primaries—during use—will of course accommodate the grey to your requirement.

Observe now that the colours, be they what they may, have their complementaries in reference to each other. Each complementary to a primary being naturally a secondary, and *vice versa*. Thus red will have green for its complementary, yellow will have purple, as blue will have orange. In a lowered scale of colour, the secondaries will seek their complementaries among the tertiaries according to their values, as

the eye will not fail to teach you, as you go on in actual practice.

Remember that the complementaries are the hues or tints which best *set off* or harmonise with those they are to display—by opposition—to the greatest advantage.

It is my desire in these little lectures to make them practical, and thus more useful to you. You are aware of the characteristics of the various complementaries, and the tints which they derive their complementary values from. Chevreul has given at great length the values of complementaries, more particularly in regard to different coloured patterns in fabrics of all sorts. Let me now try and bring about the same usefulness in regard to your employment of them in your pictorial works. To begin then—and remember that it is not chiefly in the notorious and most palpable oppositions that we painters need them most. Thus I have left you to calculate the powers numerically, and otherwise, of the tenderer varieties of opposition and harmony which are to be met with among the tertiaries; but by the painter the characteristics of tertiaries in regard to their just portions and otherwise, in reference to each other, are carried still further, though practice and observation will lead you into appreciation of their necessities and their effects.

Skies, in reference to the other portions of your pictures, must have such just balance as that harmony may be found to exist throughout the work.

"*All depends upon the key*" was the answer of Turner to a question I once put to him, as to whether or not a certain picture which we were both looking at were not too light.

We may paint a picture in a light key or in a dark key, the colours throughout in either case must be sufficiently dark or sufficiently light as the requirement may call for.

We know by these laws, so well supported by Chevreul, that dark of whatever kind, may be, and in fact is complementary to light. Black, for instance, is complementary to white. If we wish to juxtapose, and it often is necessary even for discord's sake to do so, two hues which are discordant, this may be done by interposing or placing between them white or grey. The white or the grey must be in its power such only as will harmonise with the general tones of the picture, be they tender or otherwise. Let us seek for an example in practice. You have a landscape to paint, and commence with the sky; it shall be generally speaking a grey sky, but there shall exist patches of the blue element amongst the grey clouds.

Now it is a common error when such patches of blue occur, to paint them too strong in colour—too blue. This would most likely put the sky itself, even in the outset, out of harmony—out of key.

As a matter of course the sky has been so rendered, that its lower portion approaching the horizon is warmer in its grey than the upper part.

This is always the case in painting a sky. Next comes the horizon, and here also frequently occurs a common mistake—the one must be *lead* into the other. The hills, woods, or whatever occur at the horizon line, must here be kept sufficiently tender to agree with the mass of sky. The distance, or middle distance follows and here probably other colours occur; *they* also must be guardedly painted in tertiary tints, in order that they may harmonise with what has already been painted. More power has been allowed as we have advanced towards the nearer or foreground portions of the picture. Then come those parts which as chief objects, buildings, rocks, trees, figures or what else we choose, which may bear more positive colour, and here is the touchstone of our power in rendering a harmonious picture.

It might be presumed at this juncture that powerful and primary colours might be employed; but remember what Turner said, "All depends on the key," so look after your primaries at this point, and so subdue them by the means I have pointed out.

It does not follow that your picture might not have been in a more powerful key, but *how* powerful, you will be able by laws and precepts in regard to colours to judge for yourselves.

I have spoken of the rainbow as exhibiting its scale of colours, its chromatic scale let us call it, the order of tints is as before, first red beginning *on the outside*, then orange, yellow, green and blue in succession.

To this is added by the scientific another phase of this last colour, under the term indigo, which subsides into violet in its approach to the re-appearing red. And here we recall the affinity which exists between colour and musical sounds. Try the resemblance at your pianoforte. First strike the note *C*, and consider it your tonic, then take *E*, your third, which is answered by yellow in your scale of colour. Strike with these two notes your fifth, corresponding with the blue of our scale of colour.

Now strike them all together. Will your ear not be satisfied with the sweet chord produced? Now let there intervene between the notes *C* and *E* that which of course we shall call *D*, and between *E* and *G* we will introduce *F*, which shall be equivalent to the green of our scale. Now strike the *D*, the *F* and the *G*, which last is the dominant of our musical scale, this will give you the chord of the seventh, which will not fail to please your ear also. Out of this chord grows most sweetly, with the addition of the *B* which shall be sharpened, the approach to the original Tonic. The indigo of our scale of colour shall correspond by its dark tone as well as by its position to the fundamental bass, necessary. Here then we shall have the reason why we have as much blue as is given to both the other colours combined—for the blue has to do duty in both harmonies, that of the common chord, as well as the chord of the dominant or seventh.

In colour, in like manner, we find that the blue

and yellow by uniting, nullify each other, so that white or black is produced. On the other side, blue occurs again with the orange and green, to produce the fundamental shade, which we will call, if you like, the chord of the dominant.

Such is sympathy, and all depends on *that* key.

LECTURE VI.

FIGURES IN LANDSCAPE.

THE introduction of figures in landscape composition is a point of the greatest consideration for many reasons which I will, for the most part, enumerate. In the first place then, figures properly introduced may be made to give the idea of life and motion. Secondly, by costume and otherwise, they give the country, and in some cases the especial locality.

Thirdly, they give scale to the other parts or objects of the picture.

Fourthly, they give circumstance, and help to tell a story, and give also time and date.

Fifthly, they are most valuable in balance of composition as far as lines, or points, or situations are concerned.

Sixthly, they give opportunity for the introduction of harmonising colour.

The bare enumeration of the various desiderata of figures in a landscape would point at once to their

importance. The advantages which their introduction makes evident will be at once accorded, and it is my province to shew how this may best be brought about.

Primarily then, let us take into consideration the fact of their giving life and motion to a landscape.

The same applies in respect to them whether introduced as principles or mere accessories to the subject, their completeness is hardly less necessary in the latter than in the former case; but it must be borne in mind particularly that in the latter case, as I have said, that in which they are subordinate, their characteristics of execution must be such as to amalgamate with, or harmonise with, the character of execution which belongs properly to the landscape itself, while in the former case, the figures themselves forming the principal part of the subject—the landscape portion becomes in its turn the subordinate part of the picture and must be adjusted in such manner as shall best carry out the requirements of the figures. It sometimes happens — though unfrequently — that no preponderance of interest is found, and that the figures and the landscape are of equal importance. Great difficulty follows in such an arrangement, and the due balance is with much difficulty adjusted. There are many such pictures, however, by the earlier masters of both the Italian and German Schools, and we find not unfrequently in pictures of later date the combination of two painters on one work, the one executing the figures, the other the landscape portion.

The earlier masters of the archaic period, when even gold backgroumds were in use, paid the greatest attention to the landscape portions of their subjects; though in the figures resided the main circumstances of their pictures, and much as we may deplore the want of perspective both linear and aërial in these works, we cannot look without admiration at the careful carrying out of the subjects in the background or landscape portions, where we see the same care in detail and manipulation as in the more prominent figures. In most of the pictures of Bellini and other painters of his time, this will be observable.

In Hemling and John of Cologne every one will acknowledge the painstaking of one portion equally with the other. In those of Giovanni Bellini, though quaint enough, the landscape portions are by no means to be despised; always expressing the intention, though untrue by their anachronisms, of the localities appertaining to their subjects. The figures of Claude de Lorraine are acknowledged to be inferior to—nay, unworthy of, the beautiful landscapes in which he has introduced them, but they are nevertheless necessary to them, and however they may show his want of power in the drawing of these accessories, they serve to express not only his intention in regard to them, but the feeling of a requirement of them by one so able to judge as he must have been of the necessity for their introduction.

Poussin, on the other hand, possessed the power,

and with what effect he used such power, his pictı will at once attest. So also with the landscapes Salvator Rosa, Cuyp, and some others.

For the simultaneous or equal participation of figı and landscape in the carrying out of a subject, may refer to painters of our own times; I may ment two in particular, Martin and Danby, whose figı though unequal in point of drawing and other requ ments, divide equally the interest of the subj they chose, nor could either be dispensed with w out entirely destroying the effect of the story inten in the picture; witness the "Belshazzar's Feast," "the Deluge," and indeed, all the great pictures Martin; as well as "The Passage of the Red S "The opening of the Sixth Seal," and "The U Tree," and other pictures of Danby. I might all to scores of pictures by modern artists in respect this, but it is unnecessary.

I find I have run ahead of my subject and treating of the fourth section of it, namely the cumstance and story of a picture. To return then the first consideration, the effects of life and mot which figures give to a landscape.

We will suppose our subject to be a Continer street scene, one of those which L. Haghe, Hardi and Prout have so well depicted.* Let now, I s the figures which these painters have so happily troduced, be omitted; or in their place, some solit

* See Frontispiece—La Rue de la Grosse Horloge, Rouen.

FIG. 8.

figure or even two or three figures. What would be the effect? Should we feel disposed to admit the likeness or truth of pictorial description? Certainly not! Our busy London thoroughfares are hardly recognisable as the same places, if visited at a very early hour of the morning.

Let then such scenes of busy life be peopled, fully peopled. Let the action of each individual express what he is engaged upon; let the positions be varied, the direction of line in each be different, for opposition of line, forming various angles, gives to the mind of the observer the idea of motion, as the eye is led to pass backward and forward in following the forms of their outlines. Next, let the masses or spots of dark and light possess the same variety or intricacy, as far as the required *breadth* of your subject will allow; for this great circumstance or requirement of breadth is not with impunity to be interfered with.

Let us now take the quiet hill-side, warmed by the evening sunlight, where the shepherd with his dog, or the swain and his gentle Phillis repose (Fig. 8). It is well thus and in character; but the same scene shall occur, the hill-side is overshadowed by the storm cloud, and the gusty rain crosses the picture. Where is Phillis? where the shepherd? are they still there reposing? Perchance they *are there*, but not now reposing. The shepherd turns his back to the blast, and uses both hands to keep his hat on, while the habiliments of Phillis—as she flies for shelter—tell as truly as the

distant bending trees the direction of the wind and the shower (Fig. 9). Thus have we the idea of motion throughout. I must confess I have a great horror of the introduction of a noisy picnic party in a quiet nook or retired glen, motion—or the idea of it almost necessary to the group—would here be destructive of the quietude which ought, *in the picture*, to characterise the scene.

I have said that angular and conflicting lines give the idea of motion, but this may more properly apply to inanimate objects. It is not necessarily so with living things; draw a man running, with the quietest and least conflicting lines possible, and he *must* give the idea of motion or the figure must be badly drawn indeed.

A scene with rocks, streams, trees, and herbage, mountains and varied skies, may belong to any country, or to most countries; but figures introduced into such scenes, tell us at once what country is meant, and indeed in most cases what particular locality of such country is intended to be expressed. The peasant girl of Sonnino is unlike, in her dress, the peasant girl of the neighbourhood of Rome, and she of Naples differs again from both (Fig. 10). The high caps of the peasant girls of Normandy tell us at once of their country. The head gear, as well as other parts of dress, differ according to the districts of Germany intended. Who does not at once recognise the Hessian boot of the men of that part, or the hair ornament peculiarly distinctive of the women of Coblentz, and

FIG. 9.

FIG. 10.

FIG. 11.

FIG. 12.

again, the elegant little cap of cloth of gold worn by the women of Munich, and the high-backed golden comb ornament of those of Augsburg? The Swiss dresses, too, have an endless variety, and those of Spain are not less distinctive. Let us look for variety in the Eastern nations. The woman of Egypt carries her child astride her shoulder; a hundred miles higher up the Nile she is seen with her child supported on her hips. Sir Charles Fellows told me that the women of Xanthus were dressed in narrow striped dresses of a single oblong piece, and when carrying at night their pine staves for torches, they looked like a procession of priestesses in an antique bas relief. The Greek women of Athens and other parts dress much like the Turkish women, and totally unlike these. The Irish (Fig. 11), the Scottish, and the English peasants differ from each other slightly. Their sheep, their oxen, their horses and carts, their pitchers and their pans, and indeed most implements of their daily use have certain characteristics of locality. All this is to be observed and acted upon in the introduction of figures in your landscapes The methods of performing the various acts of common life differ, nay, the very carriage, the manner of walking, or sitting (Fig. 12), or standing, has its characteristic of locality, and is not to be overlooked in your general observation of nature, nor to be forgotten in your pictured representations. I could give you scores of instances, but I do not think it needful, and I satisfy *myself* by giving you the bare hint that you

may satisfy *yourselves*, and by using your own eyes and your own discretion bring about the desired end, truth in your pictured narration. This then is all I need advance in respect to the second clause of my subject, namely, that by costume, taken generally, as well as individually, the fact of locality is mainly, dependent upon the truthful introduction of figures in Landscape compositions.

I come now to my third clause, the scale which figures give to the different portions, and thus to the whole of your composition. Human beings throughout the world are known to be of an average uniform height. It is true that in every country there are short as well as tall persons, but with this the painter of Landscape has nothing to do, he chooses an average, and acts upon such as a scale.

Trees, rocks and mountains have in themselves no prescribed scale, but figures of human beings placed among them, tell us at once their magnitude or their minuteness, by comparison. I have already, indeed not unfrequently, given you the means of properly estimating the size of figures at different distances according to a perspective as simple as it is essential, and I need not revert to it at this time. This simple rule is, I may remark, sadly neglected by our modern painters of both Figure and Landscape subjects, and discrepancy and want of truth is the constant result.

It is not uncommonly the habit of Figure painters,

FIG. 13.

particularly those who paint *genre* subjects, to give you doors and windows out of which could not be thrust the heads of the figures they introduce, and it is not less common with Landscape painters to give you steps or stairs up which, from their size, their figures could not even climb.

All this is consequent upon a non-observance of true scale of proportion in the figures introduced. I may remark to you that in Martin's pictures, a carefully defined scale is always found throughout with regard to the figures, and if his mountains and his buildings appear of enormous size, he intended it, and by the size of the figures introduced, made them appear to be so.

I have said in my fourth clause, that figures give circumstance, and assist in telling a story (Fig. 13). Perhaps I need hardly have said this, it speaks for itself, nor should I indeed have named it, but for the fact that in most cases where figures are introduced by amateurs they are meaningless, and introduced without any preconceived intention, and are thus what an old writer on Art would have called "Figures to let."

Let your figures then be *intentionally* a part of your subject. If you have no reason or meaning to carry out in their introduction, leave them out; although I do think that a landscape is incomplete without them, but then they must have a meaning; they must, in fact, participate in the story of your subject, whether as respects bustle or quietude.

I have said before that a picture should be complete in its unities of time, place, and action. Now an appropriate introduction of figures will give you the power you desire in all these circumstances. Figures give you date by their costume, as well as place, and action by their positions and expressions. There are circumstances in figures which are attachable to those of time, whether early morning, midday, evening or night.

"The ploughman homeward plods his weary way," is a line familiar to all, and who, let me ask, can separate it in idea from the quiet eventide. The early eye of morning sees the milkmaid abroad. Noonday bids the Arab rest in the shade, if he can find it (Fig 14). Night tells of indoor revelry or out of door quiet, unless it be that the watchman or the prowling poacher, or the poor houseless wanderer be abroad.

But now let us direct our attention to another circumstance of figure introduction, the fifth of my category, namely, the balance of composition which figures are ever ready at our bidding to give us the power of bringing about.

Now it so happens that we have generally the opportunity of placing figures almost where we choose in our picture. This is of course not always the case, but it happens under most circumstances.

This present and the next and last section of my list are, however, so extensive, as to preclude my going fairly into the subject in this Lecture, and I may have opportunities for doing it on some other occasion.

LECTURE VII.

HOW THE EYE SEES—AND WHAT.

I HAVE already remarked upon the fact of very many people looking without seeing, or seeing without observing. In this little Lecture I propose to describe briefly the functions of the human eye, by what means it fulfils its office. I had a young friend to read to me, as my failing sight prevented me from doing so for myself. The voice was pleasant. The intonation was agreeable enough. Most of the words were well expressed, but there were many which from sheer carelessness were miscalled. Some were not real words at all, yet they sounded like real words in the current course of the reading; but it was in most respects sheer nonsense. Now how came this? What habit had induced it?

Some of my fair young friends are I fear in the habit of reading to themselves, novels, trashy novels, full of sounding words but questionable sense. It is desirable to get on as quickly as possible to the most

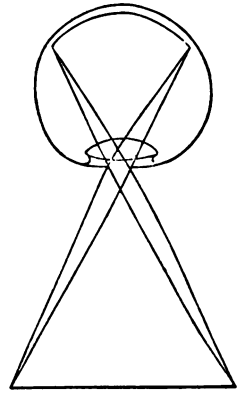
interesting portions; thence the reason for gabbling over or skipping, as it is called, those parts which are not interesting, in order to get over the ground as quickly as possible. One day whilst contemplating that famous and beautiful scene from the Wyndcliff in Monmouthshire, there came up two ladies, mother and daughter. The younger one produced her drawing materials, book and pencil, and sat down on the seat to make a sketch of the glorious landscape before her. The mother sat down by her side and producing her novel, commenced reading. The chapter ended, which may have occupied ten minutes, she said to the daughter, "Florry, dear, how long shall you be?" "I have finished, mamma;" was the reply, as she shut up the sketch-book.

Now this young lady had, in the ten minutes, finished a sketch—copy—call it so if you like, of this wonderful scene, full of interest in detail. She had gabbled it over, had miscalled or misrepresented most of the passages, and had thus made nonsense of that which was before her eyes, to claim her highest admiration. May this not be likened to what has just been remarked upon in respect to the reading of the novel? The one is the counterpart of the other. The treatment the same. And this is what I have attempted to express as "looking without seeing," or "seeing without observing." I need not enlarge on this simple fact, it tells its own story, in detail, and in combination. It is too common a case to need carry-

ing further, so into my subject to which it applies I enter at once.

I will not trouble you here with more technical expressions than I can help. The human eye, as everybody knows, is provided with a hollow cavity in which it

FIG. 15.



is placed. This cavity is not simply a round hole; but is a space beautifully adapted in its interior conformation to its requirements. Its outer bony rim projects in most parts in such a way as to guard from injury the wonderful piece of mechanism it ensheaths. Its lining is adapted to the convolutions necessary to the organ, and to its muscular apparatus of motion. Let us now take the eye-ball itself. It may perhaps be in some measure likened to an egg, but it is in shape not ovoid, but nearly globular. Like the egg, it is enclosed in

a shell, not however like that of the egg, hard and brittle, but though firm, flexible, compressible, and made to adapt itself to the irregular surface against which it has to rotate. The shell, even like the egg, is composed of two coatings—one is known as the cornea or white of the eye, the other the sclerotic, which indeed forms a part of the same coating for the transparent aqueous humour within, which we may perhaps liken to the albumen or white of the egg. A circular space is covered in front outwardly, by the iris, a flexible surface of a moderate size, this varies in different persons according to circumstances which I will presently allude to. In the middle of this, is a little round window, or hole, which appears black because it is dark within. At the back of this is situated the crystaline lens, through which all outward objects—namely everything we look at—is imaged. The surface of the space at the back of the interior of the eye-ball is called the retina—a velvet-like surface adapted in a most wonderful way to the reception of the said images, and portions and varieties of images thus thrown upon it. The beautiful construction of this it is hardly necessary to enlarge upon. The rays, describing the differences of form of objects, and which come through the little window or round opening, cross each other in their passage through the crystaline lens, or little spy-glass, as we may call it, and thus give reversed images of what we are looking at on the retina.

The retina is not equal in its surface throughout; but is suited to receive the different qualities imaged upon it. Approaching the inner corner of the eye, it becomes paler as it mixes up with the optic nerve in a cream-like substance, before the nerve itself takes the nature of a bundle of threads or cords, bound up in a sheath, through which it is conducted to the brain, not straight upwards at once, but diagonally, to that part of the brain which is above the other eye, the corresponding nerves of such other eye crossing conformedly. In thus crossing, the nerves in their varying convolutions adhere partially to each other, making an intricate net-work, which in this state passes toward the hinder part of the brain.

The crystaline lens has in a most complete manner impressed all the delicate perspective difficulties of the object or objects so thrown upon the retina, and the picture is thus complete. In such state it is conveyed by the optic nerve to the brain. Both its form and colour however will be more or less true, in proportion to the critical powers of the eye, or those of the conveying media to the brain, or even the healthy power of the brain itself.

Thus it happens that there is much difference in regard to colour and its appreciation in different persons, insomuch that some are even affected with colour-blindness, or inability to judge between different hues, as I have before mentioned.

Here we come to a consideration of much perplexity,

for there is no doubt that a system sanguine or otherwise, more or less affects the eye in the first place in its colour, and thus or then, all the impressions, feelings, or ideas dependent on it.

Thus it would follow that a black man would see colours differently from a white man, that a fair person—say with blue eyes and rosy complexion—would be impressed with different ideas regarding colour, from him who was of colder complexion.

Compare now the works of J. M. W. Turner and E. M. Ward, both excellent in their kinds.

In this speculation I leave you to your own resources, remarking, however, that colour as well as form, is also affected by the sympathy belonging to our own natures. It will be found that a short man will paint the figures in his pictures short like himself, as the tall man will make them tall like *himself*.

We have shown in some measure *how* the eye sees, and it remains for us to remark as to *what* it sees.

We will suppose a landscape painter about to choose his subject, trees, mountains, skies, and so forth. And first as to trees. He has been induced by habit, general impression and vulgar instruction, in other words he has been taught to believe that trees are green. They are *what* he believes them to be in colour. Further calculation or high instruction will however prove to him that he does not always see them green, never wholly green.

Atmosphere is ever intervening and imposing its

own colour or quality upon different portions according to distances, as well as according to the dispositions of parts more or less turned to or from light. The blue light of heaven will shine down upon those leaves which turn their faces upwards, the warmer tints of earth will be reflected on their undersides. Those masses will be generally affected by the amount of atmosphere whose wont is to make cooler (or bluer) colour or hue upon which it acts.

The deeper hollows or shadows will be the parts mostly affected by the intervening atmosphere, and thus the more distant trees will naturally have less difference of light and shade than the nearer ones.

We often hear mention made of the blue mountains. They are not blue. We are told they are blue through common parlance. We believe they are, in fact they *do* appear blue, and blue is therefore what we see. Why the mountains appear of this hue or otherwise —for they do not always appear so—is dependent upon various circumstances of their own local colour, their construction, their positions as regards light, the warmth or coolness of that light, namely whether the sun be high above the horizon or otherwise, and thus whether golden rays are thrown upon the lighted portions or cool generalised day-light. A distant hill covered with dark trees will appear bluer than one grass covered, or bare. Then as to the skies themselves, the portion near the horizon will be warmer in colour than that above it.

We look at it through a greater amount of atmosphere as lying near to the earth, and in consequence of this amount of atmosphere it has become altered in hue. The alteration in hue, however, is totally different to that which we have notified in regard to the trees, for it will be remarked that in this case the intervening atmosphere has produced warmth of colour in the object, instead of coolness or blueness. The reason is this, that *light* seen through fog or thickened atmosphere, becomes redder and darker, while anything dark itself becomes lighter and bluer by the intervention of such atmosphere. I will repeat an instance of this as it will best express what I would enforce.

Travelling with an artist friend, one eventide in the North of Germany, we were induced to turn aside to view a large beech tree known as the "König's Buche." Of course, it was not to be compared in size or beauty with the beech trees of our own country. There we found a short-petticoated mädchen who proffered for sale bottles of birken wasser; we partook, of course, of this delicious beverage and asked, "What is that structure of pine stems and turf which is there before us?" She answered, "It is where the huntsmen repose for a short time after the fatigues of the day, it is now, however, at this moment occupied by some wood-cutters who are about to cut down the mass of fir trees behind it; you observe the blue smoke which issues from an aperture at the top of the hovel, *they are taking* some refreshment and have lighted a fire."

We passed on our way, but in a few days happened to revisit the same spot; the hovel was still there, but the wood-cutters had, it seems, just completed their work of hewing down the timber which formed its background, and were regaling after their exertions, smoke issued as before from the aperture at the summit of the little structure, through the hole which served for a chimney. The smoke was no longer blue, but a dull red, this difference in the colour of the smoke is to be accounted for by the fact that the dark mass of trees existed no longer; and that, therefore, the clear evening sky became the background to the hovel, and its smoke, which in consequence of its having the light behind it, was thus altered in colour. This is a law more irrevocable than those of the Medes and Persians.

The facts of colour must exist as I have noted. Thus I have given you the reason of the *how* and *what* we see under the changed circumstances. I leave you to note the differences for yourselves; they apply generally and are to be taken as general rules, but their effects will be ever present if you look for them and appreciate them in practice.

LECTURE VIII.

ON TREE GROWTH.

RUSKIN has observed that in the growth of trees in general, Nature has laid down a certain law to this effect:—

Up to a certain height the stem is equal in bulk, that when a branch is thrown off, the stem, continuing its growth above such throwing off of branch, becomes thinner by just as much as it has lost in the branch grown out of it, and so of other branches occurring higher up the stem, so that the parent stem becomes more attenuated as it approaches its summit (Fig. 16).

The same rule applies to the branches themselves, as they in their turn throw out from themselves other branches, and those other branches again more branches, and so on throughout.

This, as a general rule, may be true enough, but it is subject to qualifications under certain circumstances of position, soil, surroundings, and so forth. Moreover, it does not agree with the mode of growth of all trees,

the fir tribe, for instance, the palms of different kinds, and, indeed, many other sorts of trees; each kind has of course a mode of growth peculiar to itself.

The oak, the elm, the beech, for instance, throw out their branches at a certain angle, each after its own fashion, as Nature has ordained. You will observe, for instance, that the oak is more angular in its branching than the elm, the beech, or the ash. That the beech sends forth its large arms in grand sweeps of lateral direction. Each tree has, indeed, so decided a peculiarity in its angle of branching, that it will require your greatest attention to discriminate between or among them as to their reduction of thickness in consequence of their throwing off branches. We have further to consider facts of out-thrown roots as props or buttresses, according to the necessity of additional support as the tree becomes larger and heavier upwards.

I will here venture to quote some passages on these and other characteristics of tree-growth from remarks made by my son, Mr. E. G. Warren, whose practice has in a peculiar way made him a master of such knowledge. You will probably notice the closeness of observations in these remarks, for such you should make for yourselves in your course of study if you desire to be good painters of wood scenery.

"Nature's greatest adornments, particularly in this country, are her woods, ever beautiful, ever varying, according to the seasons, ever putting forth new glories

differing in colour, changing with each hour of the day, nay, each moment, and as the sun shifts taking new forms and making new combinations of beauty in light and shade. They are, however, *unchanging* in their natural affections and antipathies, if such attributes we may be allowed to suppose them endowed with; but they must perforce obey the great law of Nature, they struggle to live. As we mortal beings could not exist without air and nourishment, so neither can they without *light* and the nutriment that mother Earth supplies.

"Thus, to an observer of Nature it may be seen how trees, growing in great numbers together, fight and wrestle with one another for light and space, the strongest pushing the weak aside eventually, and obtaining what they struggled for—*light.*

"Their branches may be observed as intertwined—grasping one another to gain the ascendancy.

"I have observed that so earnest and intent are they in obtaining their end, neither combatants (for combatants they are, though silent ones) giving way to the other, that they will become permanently locked in each other's embrace, and becoming thus united actually growing into one another), seek the light together.

"I have seen thus an oak and a beech united in this way, their branches (where the union took place) becoming really one branch, for it there increased in *bulk suddenly* to the size of both combined.

"In a young plantation where trees grow very close together, it will be seen that they attempt to grow to the light in a straight or upward direction. Whereas the branches, if growing from trees standing alone, would radiate, or grow outward from the parent stem, as they always do in the open, those nearest the ground having a tendency to curve downwards as well as outwards away from the shade of the upper branches; but as they cannot do this when so thickly planted, their form becomes considerably altered according to the circumstances of their destiny—thus they will in the first place obey the law regulating their natural growth, but *light* being their greatest necessity (their very existence depending upon it) they at once seek it, and thus the whole form of the tree is changed.

"This makes forest-tree forms so varied and beautiful, for although a tree that had grown thus in company, if it could be taken from the others or left standing alone, would often appear distorted and ugly, from its want of symmetry, yet as a part of a grand whole it is beautiful—I mean when growing with the other members of its group, where, as they all seek the light, and a tree according to its size must fill up a certain gap, there is an exquisite balance preserved, a beautiful variety of hue and perfect proportion in light and shade. How often do we notice where a cutting occurs in a wood or forest, trees which at first sight attract us, but do not satisfy us, and if we had proceeded to paint them, we should not have been pleased with our work

when done. We should find that these trees presented an awkward appearance, usually too straight, and when we come to analyse our work, we ask ourselves why it was not satisfactory? we should find because it was not natural.

"I have already observed that in young plantations, where trees grow thickly together, after their first effort of growth as in the open, they turn eventually to the light, thus after throwing out their branches in a somewhat perpendicular direction at first, they quickly alter their course, and turn outwards in the opposite direction to that in which they commenced growing.

"This is very common if near the edge of the wood. The leaves of those branches which cannot get so much light (try though they may), are always poorer and thinner, and commonly droop more than the others. The branches, too, are less matured, shorter and thinner.

"The development of the branches of trees may be noticed in their stems, and the origin of all the leading branches can be traced there, each branch appearing to have its corresponding root or feeder. Large old trees show this in a remarkable manner, and always put me in mind of a powerful muscular man.

"A tree does not appear to suffer, when it loses a portion of its body, more than we should if we lost an arm or a leg.

"As an instance, I noticed a very fine beech tree

which was struck by lightning in the middle of June last. I remember the time well, as I was out in the forest in that same storm, and it was but a few days after that I came upon the stricken tree.

"The lightning had evidently been attracted by a young oak which grew just behind it, they both growing with other trees on a rising ground, directly facing the direction from which the storm came, but the beech was larger and taller, so the lightning took it, and running down the wet side where the rain had saturated the bark, charred it all the way down, then literally burned and charred out (as a fireplace might be hollowed out) quite three parts of the body of the tree, and it was one mass of thick soft charcoal. The tree was quite full of healthy green leaves, and the whole of it was supplied with nourishment from two or three roots on the untouched side, which is but a shell though in full leaf, and appearing to be thriving well.

"Holly seems to have a liking for beeches, and is most commonly found growing in their shade, not content, however, with its near neighbourhood to that tree, it very frequently shows a great desire to be in closer proximity; thus may it often be found even growing out of beech trees, not only so, but frequently it grows *into* them, lying embedded in their trunks.

"Trees are seldom, if ever, found fine near the sea, they will turn from it, and if on any height overlooking it they appear stunted, and their branches, after

arriving at a certain height, will grow straight out away from it, much like long hair streaming in the wind.

"Again when trees grow anywhere in exposed places in this country, unless in very large masses where they afford one another shelter and support, they most frequently have a tendency to lean to the north-east, on account of the prevalence with us of the south-east wind.

"Trees bud again just previously to the fall of the leaf in autumn, and provided we had no cold or frost would come to maturity again then; they bud close to the old leaves, and appear to assist materially in displacing them.

"Previous to this, however, there is a renewal of leafage in July, when thousands of the earlier green leaves fall to make room for the new, and I have seen the ground in the beech wood perfectly covered, and quite green with the leaves which fall in July.

"The character of trees is shewn in their earliest infancy. In their leaves, for instance, we have the character of the whole tree. The beech leaf is rounded and flowing in its form, both in the outer form and in its veins. The oak leaf on the other hand is angular and more rugged in form, and fully partakes of the character of the oak tree itself, and the resemblance of all other trees in like manner will be found in their leaves.

"The larger oaks in forests, usually stand at a suffi-

cient distance from other trees, to allow of their flinging their arms out in all their freedom, and it is a very common thing to see other trees standing in a circle at a respectful distance from the monarch.

"Polled or pollard trees usually grow out in bulk in the lower portion, and frequently have large grotesque protruding roots, generally called picturesque, though I must confess I can admire them no more than I could a dwarfed man, for I think the grandeur and beauty of a tree consists in its vast and graceful proportions, mighty strength, and beauty, and symmetry combined.

"The elm I think is a grand tree, and combines the vigour of the oak with the beauty of the beech. It is often very fine too, in masses or clumps, and adds largely to the beauty of the English Landscape. The colour of the foliage, moreover, is always of a pleasing and soothing tone, there are some splendid examples in the neighbourhood of Albury in Surrey. Perhaps the particular characteristic of the elm is more that of grace, though at the same time it is grand in its vast masses of foliage. The branches generally spread out mostly in the upper portions, when growing singly (plume like) the middle branches nearly perpendicular, then drooping on either side, lower still, nearer the middle of its height, horizontal, or nearly so, and the lowest drooping. They are at all times of the year free from the dumpy or rounded forms of some trees when fully laden with leaves; and with all

their grace, there is a certain sufficiently angular and decided character about them, which renders them peculiarly ornamental and picturesque. I think the elm would be well described as a stately tree.

"The beauty of the willow, I apprehend, consists more in its cool and silvery freshness of foliage, and from the circumstance of its generally being accompanied by water, than in anything else. The beautiful silver grey of its leafage, therefore, I take to be its chief ornament."

THE END.

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